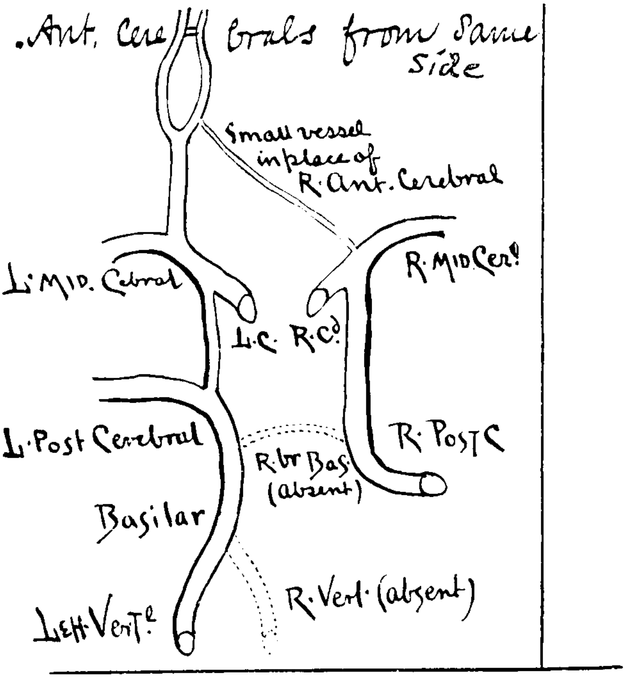
SPECIMEN SHOWING ANOMALY OF THE CIRCLE OF WILLIS.[1]

By JAMES HENDRIE LLOYD, M.D.,

THE specimen was taken from an insane man, who died in the Philadelphia Hospital—a case of chronic mania. In the large number of brain-dissections which I have seen or conducted, this is the first time I have met with an anomaly of the circle of Willis, although such anomalies are not uncommon. This anomaly under some circumstances might be of clinical or pathological interest, and will be best illustrated by a diagram. Ordinarily the two



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[1] Presented to the Philadelphia Neurological Society, January 27, 1890.

vertebral arteries unite to form the basilar; in this case the right vertebral artery did not exist. The basilar artery was a continuation of the vertebral artery of the left side. It sent off as usual the posterior cerebral artery. The posterior communicating artery on the left side was a very large trunk; in fact, this was one large continuous vessel from the foramen magnum. The left internal carotid then divided into the middle cerebral and the anterior cerebral. The anterior cerebral arteries of both sides sprang from this one trunk. Practically more than one-half of the brain was supplied from this one side. On the other side the carotid gave off as usual the posterior communicating artery, which is a large trunk, in this case practically continuous with the posterior cerebral artery. The branch of the basilar, which as a rule forms the posterior cerebral artery, is here small, rudimentary, and probably non-pervious, as is also the branch of the carotid, which ordinarily forms the anterior cerebral.

This anomaly is described by Duret. One singular thing is that the branching of the posterior cerebral from the carotid generally takes place on the right side. The vertebral artery of the left side is usually the largest, and when only one is present it is apt to be the artery of the left side. The only apparent reason for this is that the left vertebral artery derives its supply more directly from the subclavian than does the right vertebral. What pathological interest this anomaly has I cannot say. Embolism in such a case might give rise to some peculiar symptoms; but I doubt if the condition could be recognized in life.

THE FUNCTIONS OF THE BRAIN.

The doctrines of the Italian school are embodied in the first part of a paper (fifty pages) by Jules Soury in the November number of the "Archives de Neurologie." The cortical centres for cutaneous and muscular sensibility and for voluntary movements are considered.

HYSTERO EPILEPSY IN BOYS. (*Ibid.*)

The history of three cases forms a contribution to the study of this subject, by Bourneville and P. Sollier. L.F.B.